

Sub
CS 10
Ale

a plurality of third dual axis clamps that are each rotatable, slidable and securable to a respective third rod and that are each rotatable, slidable and securable to a fourth rod that is disposed generally transverse to the respective third rod; and

a plurality of fourth dual axis clamps that are each rotatable, slidable and securable to a respective fourth rod and that are each rotatable, slidable and securable to a fifth rod.

18. The fixture recited in Claim 17 further comprising a plurality of fifth dual axis clamps that are each rotatable, slidable and securable to the fifth rod and that are each rotatable, slidable and securable to a sixth rod.

REMARKS

Regarding the status of the present application, Claims 1, 3-9, 11-15, 17 and 18 have been amended, and Claims 1-19 are pending in this application. Reconsideration of this application is respectfully requested.

Minor typographical errors were found in the specification and have been corrected by this amendment.

The drawings were objected to under 37 CFR 1.83(a). The Examiner indicated that the plurality of first, second, third, and fourth dual axis clamps being interconnected must be shown or the feature(s) canceled from Claims 7, 8, 10 and 14-19. It is respectfully submitted that do not state that the plurality of first, second, third, and fourth dual axis clamps are interconnected. What is essentially recited in these Claims is that individual sets of clamps are used to interconnect different rods to form the articulating structure, not that the clamps are connected together as was stated by the Examiner. It is respectfully submitted that the drawings show all elements recited in the Claims and particularly Claims 7, 8, 10 and 14-19. In view of the above, withdrawal of the Examiner's objection is respectfully requested.

Claims 7, 8, 10 and 14-19 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner indicated that "In claims 7-8, 10, and 14-19, the a plurality of first, second, third, and fourth dual axis clamps being interconnected with interconnecting rods is not described in the specification nor shown in the drawings." It is respectfully submitted that the Examiner's rejection is not understood.

Claim 7 does not recited that the plurality of first, second, third, and fourth dual axis clamps are interconnected with interconnecting rods. This statement by the Examiner implies that the interconnecting rods contact each of the first, second, third, and fourth dual axis clamps. This is not the case.

What is stated in Claim 7 is that the articulated structure comprises "a plurality of first dual axis clamps that are each rotatable, slidable and securable to a fixed rod and that are each rotatable, slidable and securable to a second transverse rod". Looking at Fig. 1, for example,

and as is disclosed in the detailed description, what is shown and disclosed is that two first dual axis clamps 14 are slidably and rotatably secured to a first rod 13. The front-most horizontal rod 13 has two first dual axis clamps 14 that are slidably and rotatably secured to it (illustrated by the arrowed lines).

It is further stated in Claim 7 that the articulated structure comprises "a plurality of second dual axis clamps that are each rotatable, slidable and securable to a respective second rod and that are each rotatable, slidable and securable to a third rod that is disposed generally transverse to the respective second rod". Looking at Fig. 1, and as is disclosed in the detailed description, what is shown and disclosed is that two second dual axis clamps 14a are respectively secured in a slidable and rotatable manner to each of two second (vertical) rods 15. The respective second rods 15 are also secured by the first dual axis clamps 14. The two second dual axis clamps 14a are attached to two (horizontal) third rods 21.

It is further stated in Claim 7 that the articulated structure comprises "a plurality of third dual axis clamps that are each rotatable, slidable and securable to a respective third rod and that are each rotatable, slidable and securable to a fourth rod that is disposed generally transverse to the respective third rod". Looking at Fig. 1, and as is disclosed in the detailed description, what is shown and disclosed is that two third dual axis clamps 14b are secured to the respective second rods 15 and also each secure a third (vertical) rod 23.

It is further stated in Claim 7 that the articulated structure comprises "a plurality of fourth dual axis clamps that are each rotatable, slidable and securable to a respective fourth rod and that are each rotatable, slidable and securable to a fifth rod". Looking at Fig. 1, and as is disclosed in the detailed description, what is shown and disclosed is that two fourth dual axis clamps 14c are secured to the respective third (vertical) rods 23 and are both secured to a (horizontal) fourth rod 25.

It is therefore respectfully submitted that the specification and drawings show what is recited in Claim 7. Withdrawal of the Examiner's rejection of Claim 7 is respectfully requested.

With regard to Claim 8, it states that the fixture further comprises "a plurality of fifth dual axis clamps that are each rotatable, slidable and securable to the fifth rod and that are each rotatable, slidable and securable to a sixth rod". Looking at Fig. 1, and as is disclosed in the detailed description, what is shown and disclosed is that two fifth dual axis clamps 14d are slidably secured to a fifth rod 25. The fifth dual axis clamps 14d are located at the respective distal ends of the fifth rod 25.

It is therefore respectfully submitted that the specification and drawings clearly show that what is recited in Claim 8. Withdrawal of the Examiner's rejection of Claim 8 is respectfully requested.

With regard to Claim 10, it states that the fixture further comprises a plurality of threaded machine screws that interconnect pairs of second and third dual axis clamps. The detailed description states that "Fig. 3 illustrates a second exemplary embodiment of a universal holding fixture 10 in accordance with the principles of the present invention. This exemplary

universal holding fixture 10 is substantially the same as the embodiment shown in Fig. 1 but further includes two threaded machine screws 29 that interconnect the upper pairs of dual axis clamps 14a, 14b." Looking at Fig. 3, the threaded machine screws 29 are clearly shown. The embodiment of the present invention shown in Fig. 3 is substantially the same as the one shown in fig. 1, but includes the two threaded machine screws 29 that interconnect the upper pairs of dual axis clamps 14a, 14b.

It is therefore respectfully submitted that the specification and drawings clearly show that what is recited in Claim 10. Withdrawal of the Examiner's rejection of Claim 10 is respectfully requested

With regard to Claims 14-19, it is respectfully submitted that the arguments presented above with regard to Claims 7, 8 and 10 are pertinent to the fact that the inventions recited therein are clearly disclosed in both the specification and drawings. Withdrawal of the Examiner's rejection of Claims 14-19 is respectfully requested

Claims 11-16 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 was also addressed but not listed as being rejected. The Examiner pointed out certain instances of vague language in Claims 4 and 11. Claims 4 and 11 have been amended to address the Examiner's issues. In view of these amendments, it is respectfully submitted that the pending Claims are be clear and definite. Withdrawal of the Examiner's rejection is respectfully requested.

Claims 1, 2, 9 and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by US Patent No. 4,949,944 issued to Groff, Sr. It is respectfully submitted that the present invention is not obvious in view of the Groff, Sr. patent.

The Groff, Sr. patent discloses that "A model airplane jig is disclosed which is particularly adapted to support a model gasoline engine airplane in substantially any position or orientation so that repairs can be made to the same. The jig includes a weighted base and a vertical post extending upwardly therefrom. A horizontal beam is pivotally connected to the top of the post through a ball joint and trunnion with the connection being radially offset from the axis of the post. Front and rear wheel clamps adjustably mounted adjacent the ends of the horizontal beam attach to the wheels of an airplane and secure the plane to the jig." It is respectfully submitted that the invention recited in Claim 1 is not disclosed or suggested by the Groff, Sr. patent

Claim 1 calls for a universal holding fixture for holding an object that comprises "a plurality of dual axis clamps that are each rotatable, slidable and securable to rods to form an articulated structure, which rods and clamps are rotatable and slidable relative to each other to position the rods at varying and arbitrary angles relative to each other, and wherein selected rods are suitably positioned and secured to hold the object". The Examiner's stated that "Groff, Sr discloses a universal fixture having a plurality of dual axis clamps (44, 58, 60, 70, 82, 84, 86)

each are rotatably and slidably secured (The clamps will not rotate not slide), and a base (12, 18, 28)."

With regard to the comment by the Examiner that "The clamps will not rotate not slide", it appears that the Examiner has admitted that the claims do not rotate or slide, which is the opposite from the present invention. In the present invention, the dual axis claims can rotate and slide, and are then lockable or securable in the position to which they are moved. In the Groff, Sr. fixture, the clamps appear to be slidable and lockable in the position to which they are moved, but they are not rotatable. Note that the beams have a square cross section. This square shaped beam prevents "any rotational movement of the various component parts" of the fixture.

Furthermore, the Groff, Sr. patent states that "In the preferred embodiment of the invention, the beams and sleeve connectors are all of square cross section so as to prevent any rotational movement of the various component parts. Thus, irrespective of the height of the cross beam 54, its position along the length of the main beam 46 or the position of the sleeve connector 60 along the length of the beam 54, the beam 54 will always be perpendicular to the main beam 46." Thus, it is the intent of the Groff, Sr. fixture to prevent rotation relative to the rods. This is not what is presently claimed.

It is respectfully submitted that each of the clamps used in the Groff, Sr. fixture are not rotatably and slidably secured to rods. In the present invention, all of the clamps are dual axis clamps, and are each rotatably and slidably secured to rods and permit each of the rods to be oriented at any desired angle. This is not the case with the clamps used in the Groff, Sr. fixture.

In particular, looking at Fig. 4 of the Groff, Sr. patent, it shows a side view of the clamping means 84 shown in Figs 1 and 5. Note that the transverse rod 46 has a square cross section. A ball joint mechanism 28, 40 is attached to a short tubular sleeve 44. While the tubular sleeve is allowed to slide along the rod 46 and may be secured thereto by means of the bolt 48, it is not allowed to rotate around the rod. Rotation is provided by means of the ball joint mechanism 28, 40 and a trunnion 32. Therefore, it is respectfully submitted that this clamp mechanism of the Groff, Sr. fixture is not rotatably and slidably secured to the transverse rod.

Similarly, the two front wheel and clamping support means 82, 84 and rear sleeve connector 70 are not rotatable around the rods 54, 46 to which they are attached. This is because the rods 54, 46 have square cross sections.

Therefore in view of the above, it is respectfully submitted that the Groff, Sr. patent does not disclose or suggest "a plurality of dual axis clamps that are each rotatable, slidable and securable to rods to form an articulated structure", and wherein the "rods and clamps are rotatable and slidable relative to each other to position the rods at varying and arbitrary angles relative to each other", as is recited in Claim 1. [Emphasis added] Also, it is respectfully submitted that the present invention is not derivable from the teachings of the Groff, Sr. patent without distorting or extending the teachings thereof and using hindsight reconstruction using the teachings of the Groff, Sr. patent in light of Applicant's own teachings.

Therefore, it is respectfully submitted that the invention recited in independent Claim 1 is not disclosed or suggested by the Groff, Sr. patent. Withdrawal of the Examiner's rejection and allowance of Claim 1 are respectfully requested.

Dependent Claims 2 and 9 are considered patentable based upon their dependence from allowable Claim 1.

With regard to Claim 9, it is respectfully submitted that the Groff, Sr. patent, does not disclose or suggest that the fixture further comprises "a plurality of fifth dual axis clamps that are slidably and rotatably secured to the fifth rod and that are each slidably secured to a sixth rod, and wherein the sixth rods support the fifth rod at different positions above the base".

The Groff, Sr. fixture has a vertical post 16 that is attached to a base 12, a transverse rod 46 attached by way of the ball joint mechanism 28, 40 and trunnion 32, a transverse cross beam 54, two rods 98 at the front end of the fixture that are parallel to the transverse rod 46, and one rod at the rear end of the fixture that is parallel to the transverse rod. In the invention recited in Claim 9, the fixture has a plurality of fifth dual axis clamps and six sets of rods, which are not disclosed or suggested by the Groff, Sr. patent.

It is respectfully submitted that Groff, Sr. patent does not disclose or suggest a plurality of sixth rods that support a fifth rod at different positions above a base. The upper portion of the fixture is connected to the base by way of the ball joint mechanism and trunnion and the extendable vertical post. However, it is respectfully submitted that this does not correspond to a plurality of sixth rods that support a fifth rod at different positions above a base.

The connecting post 62 appears to allow the transverse cross beam 54 to be positioned at different distances below the main beam 46. However, since there is only one vertical rod 60, it is respectfully submitted that this does not correspond to a plurality of sixth rods that support a fifth rod at different positions above a base.

There is also an L-shaped vertical rod also appears to allow the rear wheel clamping mechanism to be positioned at different distances above the main beam 46. However, since there is only one vertical rod, it is respectfully submitted that this does not correspond to a plurality of sixth rods that support a fifth rod at different positions above a base.

Therefore, it is respectfully submitted that the invention recited in Claim 9 is not disclosed or suggested by the Groff, Sr. patent.

With regard to independent Claim 11, it is respectfully submitted that the Groff, Sr. patent, does not disclose or suggest a fixture that comprises "an articulated structure secured to the base that comprises a plurality of dual axis clamps that are each rotatable, slidable and securable to at least one rod, which rod and clamps are rotatable and slidable relative to each other to position the rod at varying and arbitrary angles". The reasons argued above with regard to Claim 1 are responsive to the Examiner's rejection. In particular, it is respectfully submitted that Groff, Sr. patent does not disclose or suggest "a plurality of dual axis clamps that are each rotatable, slidable and securable to at least one rod", as is recited in Claim 11. Also, it is respectfully submitted that the present invention is not derivable from the teachings of the Groff,

Sr. patent without distorting or extending the teachings thereof and using hindsight reconstruction using the teachings of the Groff, Sr. patent in light of Applicant's own teachings.

Therefore, it is respectfully submitted that the invention recited in Claim 11 is not disclosed or suggested by the Groff, Sr. patent. Withdrawal of the Examiner's rejection and allowance of Claim 11 are respectfully requested.

In view of the above, it is respectfully submitted that Claims 1, 2, 9 and 11 are not disclosed or suggested by the Groff, Sr. patent. Withdrawal of the Examiner's rejection and allowance of Claims 1, 2, 9 and 11 are respectfully requested.

Claims 1, 2, 9 and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by US Patent No. 5,630,576 issued to Williams. It is respectfully submitted that the present invention is not disclosed or suggested the Williams patent.

The Williams patent discloses "A workpiece clamping apparatus for securing a workpiece relative to a planar support surface has a pair of saddle clamp members each provided with a plurality of threaded apertures. A mounting member associated with selected ones of the plurality of threaded apertures is provided for operably attaching saddle clamp members to the planar support surface in a variety of orientations. Each saddle clamp member can engage a portion of a bar clamp. Each saddle clamp member can also engage a portion of a length of pipe which can have pipe clamps thereon." The Examiner's position is that "Williams discloses a universal fixture having a plurality of dual axis clamps (51) each are rotatably and slidably secured (The clamps will not rotate not slide), rods (55-57), and a base (100)." The Williams patent specifically discloses a "workpiece clamping apparatus for securing pipes and bars to a planar support surface".

Claim 1 calls for a universal holding fixture for holding an object that comprises "a plurality of dual axis clamps that are each rotatable, slidable and securable to rods to form an articulated structure, which rods and clamps are rotatable and slidable relative to each other to position the rods at varying and arbitrary angles relative to each other, and wherein selected rods are suitably positioned and secured to hold the object".

It is respectfully submitted that Williams patent does not disclose or suggest that the workpiece clamping apparatus comprises a plurality of dual axis clamps, or that the clamps are each rotatable, slidable and securable to rods. Also, the Williams patent does not disclose or suggest that the rods and clamps are rotatable and slidable relative to each other to position the rods at varying and arbitrary angles relative to each other. A detailed reading of the Williams patent reveals that the saddle clamps 50 are secured to the base 100 or to a grid block member 40 that is secured to the base 100. None of the saddle clamps disclosed in the Williams patent are both rotatable and slidable. The Williams patent states that "the grid block member 40 may be optionally received either in the channel tracks 103 of the planar support surface 100 or, by using the mounting post 45, may be received in the apertures 102 of the planar support surface 100". This is the only use of the term "rotate" in the Williams patent.

It is respectfully submitted that the saddle clamps are not each rotatable, slidable and securable to rods to form an articulated structure. Furthermore, whatever structure is formed by the Williams apparatus, it is not an articulated structure as is provided by the present invention. No articulated structure is disclosed or suggested by the Williams patent that is used to hold an object. In fact, pipe is held by the saddle clamps and the clamp/pipe structure is not an articulated structure. Also, the rods are not capable of being positioned so that they are at varying and arbitrary angles relative to each other.

Therefore, it is respectfully submitted that the invention recited in independent Claim 1 is not disclosed or suggested by the Williams patent. Withdrawal of the Examiner's rejection and allowance of Claim 1 are respectfully requested.

Dependent Claims 2 and 9 are considered patentable based upon their dependence from allowable Claim 1. Also, with regard to Claim 9, it is respectfully submitted that the Williams patent, does not disclose or suggest a fixture comprising "a plurality of fifth dual axis clamps that are each rotatable, slidable and securable to the fifth rod and that are each rotatable, slidable and securable to a sixth rod, and wherein the sixth rods support the fifth rod at different positions above the base". Only two saddle clamps are disclosed in the Williams patent.

Therefore, it is respectfully submitted that the inventions recited in Claims 2 and 9 are not disclosed or suggested by the Williams patent. Withdrawal of the Examiner's rejection and allowance of Claims 2 and 9 are respectfully requested.

With regard to independent Claim 11, it is respectfully submitted that the Williams patent, does not disclose or suggest a fixture that comprises "an articulated structure secured to the base that comprises a plurality of dual axis clamps that are each rotatable, slidable and securable to at least one rod, which rod and clamps are rotatable and slidable relative to each other to position the rod at varying and arbitrary angles". The reasons argued above with regard to Claim 11 are responsive to the Examiner's rejection. In particular, it is respectfully submitted that Williams patent does not disclose or suggest "a plurality of dual axis clamps that are each rotatable, slidable and securable to at least one rod", as is recited in Claim 1. Also, it is respectfully submitted that the present invention is not derivable from the teachings of the Williams patent without distorting or extending the teachings thereof and using hindsight reconstruction using the teachings of the Williams patent in light of Applicant's own teachings.

Therefore, it is respectfully submitted that the invention recited in independent Claim 11 is not disclosed or suggested by the Williams patent. Withdrawal of the Examiner's rejection and allowance of Claim 11 are respectfully requested.

In view of the above, it is respectfully submitted that Claims 1, 2, 9 and 11 are not disclosed or suggested by the Williams patent. Withdrawal of the Examiner's rejection and allowance of Claims 1, 2, 9 and 11 are respectfully requested.

Claims 3, 5 and 6 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Examiner also indicated that Claims 4, 12 and 13 would

be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, and to include all of the limitations of the base claim and any intervening claims. The finding of allowable subject matter in this application is appreciated. However, Claims 3- 6, 12 and 13 have not been placed in independent form at this time pending consideration of the above amendments and arguments regarding the patentability of the present invention.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure to the extent indicated by the Examiner.

Attached hereto is a marked-up version of the changes made to claims by the present amendment. The attached page is captioned "Version with markings to show changes made."

In view of the above, it is respectfully submitted that all pending Claims are not anticipated by the cited patents, are therefore patentable, and that the present application is in condition for allowance. Reconsideration and allowance of this application are earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kenneth W. Float", with a stylized flourish at the end.

Kenneth W. Float
Registration No. 29,233

The Law Offices of Kenneth W. Float
Office Address: 2 Shire, Coto de Caza, CA 92679
Mailing Address: P. O. Box 80790, Rancho Santa Margarita, CA 92688
Telephone: (949) 459-5519
Facsimile: (949) 459-5520

VERSION WITH MARKINGS TO SHOW CHANGES MADE**IN THE SPECIFICATION**

The specification at page 4, starting at line 34, has been amended as follows.

A third dual axis clamp 14b is slidably secured to each of the third rods 21. Each third dual axis clamp 14b may be moved or slid along the third rod 21, independently rotated around the third rod 21, and secured in the moved and rotated position. Each of the third dual axis clamps 14b also secures a fourth rod 23 that is aligned substantially orthogonal to the third rod 21. Rotation of each fourth [forth] rod 23 and third dual axis clamp 14b around the axis of the third rod 21 positions the fourth [forth] rod 23 at any desired angle. Each of the third rods 21 may have a resilient member 17 attached to ends thereof that contact a workpiece.

The specification at page 5, starting at line 5, has been amended as follows.

A fourth [forth] dual axis clamp 14c is slidably secured to each of the fourth [forth] rods 23. Each fourth [forth] dual axis clamp 14c may be moved or slid along the fourth [forth] rod 23, independently rotated around the fourth [forth] rod 23, and secured in the moved and rotated position. Each of the fourth [forth] dual axis clamps 14c also secures a fifth rod 25 that is aligned substantially orthogonal to the fourth [forth] rods 23. Rotation of the fourth dual axis clamps 14c around the axis of each fourth [forth] rod 23 positions the fifth rod 25 at any desired angle.

IN THE CLAIMS

The following Claims have been amended as indicated.

1. (Amended) A universal holding fixture for holding an object, comprising:
a plurality of dual axis clamps that are each [rotatably and slidably secured] rotatable, slidable and securable to two rods to form an articulated structure, which rods and clamps are rotatable and slidable relative to each other to position the rods at varying and arbitrary angles relative to each other, and wherein selected rods are suitably positioned and secured to hold the object.

3. (Amended) The fixture recited in Claim 2 wherein a fixed rod is secured to the base and the articulated structure comprises eight dual axis clamps that are [slidably secured] rotatable, slidable and securable to six rods.

4. (Amended) The fixture recited in Claim 3 further comprising two additional rods that are slidably secured to a selected one of the [four] rods by way of two additional dual axis clamps.

5. (Amended) The fixture recited in Claim 1 wherein the articulated structure comprises eight dual axis clamps that are [slidably secured] rotatable, slidable and securable to six rods.

6. (Amended) The fixture recited in Claim 5 further comprising two additional rods that are [slidably secured] rotatable, slidable and securable a selected one of the four rods by way of two additional dual axis clamps.

7. (Amended) The fixture recited in Claim 1 wherein the articulated structure comprises:

a plurality of first dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a fixed rod and that are each [slidably secured] rotatable, slidable and securable to a second transverse rod;

a plurality of second dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a respective second rod and that are each [slidably and rotatably secured] rotatable, slidable and securable to a third rod that is disposed generally transverse to the respective second rod;

a plurality of third dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a respective third rod and that are each [slidably and rotatably secured] rotatable, slidable and securable to a fourth rod that is disposed generally transverse to the respective third rod; and

a plurality of fourth dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a respective fourth rod and that are each [slidably and rotatably secured] rotatable, slidable and securable to a fifth rod.

8. (Amended) The fixture recited in Claim 7 further comprising a plurality of fifth dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to the fifth rod and that are each [slidably secured] rotatable, slidable and securable to a sixth rod.

9. (Amended) The fixture recited in Claim 1 wherein a plurality of first dual axis clamps are [secured] securable to a base and wherein the fixture further comprises a plurality of fifth dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to the fifth rod and that are each [slidably secured] rotatable, slidable and securable to a sixth rod, and wherein the sixth rods support the fifth rod at different positions above the base.

11. (Amended) A universal holding fixture for holding an object, comprising:
a base; and

an articulated structure secured to the base that comprises a plurality of dual axis clamps that are each [rotatably and slidably secured] rotatable, slidable and securable to at least one [or more rods] rod, which rod and clamps are rotatable and slidable relative to each other to position

the rods at varying and arbitrary angles, and wherein ends of selected ones of the rods are suitably positioned and secured to hold the object.

12. (Amended) The fixture recited in Claim 11 wherein a fixed rod is secured to the base and the articulated structure comprises eight dual axis clamps that are [slidably secured] rotatable, slidable and securable to six rods.

13. (Amended) The fixture recited in Claim 12 further comprising two additional rods [slidably secured] that are rotatable, slidable and securable to a selected one of the six rods by way of two additional dual axis clamps.

14. (Amended) The fixture recited in Claim 11 wherein the articulated structure comprises:

a plurality of first dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a fixed rod and that are each [slidably secured] rotatable, slidable and securable to a second transverse rod;

a plurality of second dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a respective second rod and that are each [slidably and rotatably secured] rotatable, slidable and securable to a third rod that is disposed generally transverse to the respective second rod;

a plurality of third dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a respective third rod and that are each [slidably and rotatably secured] rotatable, slidable and securable to a fourth rod that is disposed generally transverse to the respective third rod; and

a plurality of fourth dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a respective fourth rod and that are each [slidably and rotatably secured] rotatable, slidable and securable to a fifth rod.

15. (Amended) The fixture recited in Claim 14 further comprising a plurality of fifth dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to the fifth rod and that are each [slidably secured] rotatable, slidable and securable to a sixth rod.

17. (Amended) A universal holding fixture for holding an object, comprising:
a base; and

an articulated structure rotatably secured to the base that comprises:

a plurality of first dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a fixed rod and that are each [slidably secured] rotatable, slidable and securable to a second transverse rod;

a plurality of second dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a respective second rod and that are each [slidably and rotatably secured] rotatable, slidable and securable to a third rod that is disposed generally transverse to the respective second rod;

a plurality of third dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a respective third rod and that are each [slidably and rotatably secured] rotatable, slidable and securable to a fourth rod that is disposed generally transverse to the respective third rod; and

a plurality of fourth dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to a respective fourth rod and that are each [slidably and rotatably secured] rotatable, slidable and securable to a fifth rod.

18. (Amended) The fixture recited in Claim 17 further comprising a plurality of fifth dual axis clamps that are [slidably and rotatably secured] each rotatable, slidable and securable to the fifth rod and that are each [slidably secured] rotatable, slidable and securable to a sixth rod.